

**In the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the Application.

**Listing of Claims:**

1. (Currently amended) A computer executed method for determining a configuration for a target data storage system includes the steps of:

receiving, from a user interface, identifiers of one or more source data storage systems, wherein each of the one or more data storage systems comprise a plurality of components, the plurality of components comprising a data storage device;

receiving utilization or response time data related to the one or more source data storage systems; wherein the utilization or response time data comprises utilization or response time for at least one of the plurality of components of the one or more source data storage systems;

receiving performance characteristics of work performed on the one or more source data storage systems; wherein the performance characteristics of work performed comprises performance characteristics of work performed for at least one of the plurality of components of the one or more source data storage systems; wherein the performance characteristics comprise I/O operations comprising a number of read hits, read misses, least recently used writes, and write pending operations;

receiving, from the user interface, a number of boxes corresponding to components to be included in a target data storage system, wherein components of the target data storage system are selected in response to the utilization and response time data;

determining a recommended configuration of the target storage system by [[on]] analyzing the performance characteristics of and the utilization of the plurality of the selected components as applied to the selected components included in the target data storage system based on the number of boxes selected and the performance characteristics; and

displaying the recommended configuration of the target storage system.

2. (previously presented) The method of claim 1, wherein determining the configuration of the target data storage system includes:

determining the configuration of components of the target data storage system;

receiving, from the user interface, a change to the number of boxes in the target data storage system; and

reconfiguring the target data storage system in response to the change to the number of boxes, the utilization and response time and the performance characteristics.

3. (Original) The method of claim 2, wherein determining the configuration of components of the target data storage system is used for load balancing the performance of the target data storage system.

4. (Original) The method of claim 2, wherein determining the configuration of components of the target data storage system is used for determining the storage capacity of the target data storage system.

5. (Original) The method of claim 2, wherein determining the configuration of components of the target data storage system is used for at least partially optimizing performance of the target data storage system.

6. (Original) The method of claim 1, wherein determining the configuration of the target data storage system is used for load balancing the performance of the target data storage system.

7. (Original) The method of claim 1, wherein determining the configuration of the target data storage system is used for determining the storage capacity of the target data storage system.

8. (Original) The method of claim 1, wherein determining the configuration of the target data storage system is used for at least partially optimizing performance of the target data storage system.

9. (previously presented) A system for determining a configuration for a target data storage system comprising:

a computer having a memory and a display;

computer-executable program code operating in memory, wherein the computer-executable program code is configured for execution of the following steps:

receiving, from a user interface, identifiers of one or more source data storage systems, wherein each of the one or more data storage systems comprise a plurality of components, the plurality of components comprising a data storage device;

receiving utilization or response time data related to the one or more source data storage systems; wherein the utilization or response time data comprises utilization or response time for at least one of the plurality of components;

receiving performance characteristics of work performed on the one or more source data storage systems, wherein the performance characteristics of work performed comprises performance characteristics of work performed for at least one of the plurality of components;

receiving, from the user interface, a number of boxes to be included in a target data storage system; and

determining and displaying a configuration of the selected components for a target data storage system based on the number of boxes selected and performance characteristics.

10. (previously presented) The system of claim 9, wherein determining configuration of the target data storage system includes:

determining the configuration of components of the target data storage system;

receiving, from the user interface, a change to the number of boxes in the target data storage system; and

reconfiguring the target data storage system in response to the change to the number of boxes, the utilization and response time and the performance characteristics.

11. (Original) The system of claim 10, wherein determining the configuration of components of the target data storage system is used for load balancing the performance of the target data storage system.

12. (Original) The system of claim 10, wherein determining the configuration of components of the target data storage system is used for determining the storage capacity of the target data storage system.

13. (Original) The system of claim 10, wherein determining the configuration of components of the target data storage system is used for at least partially optimizing performance of the target data storage system.

14. (Original) The system of claim 9, wherein determining the configuration of the target data storage system is used for load balancing the performance of the target data storage system.

15. (Original) The system of claim 9, wherein determining the configuration of the target data storage system is used for determining the storage capacity of the target data storage system.

16. (Original) The system of claim 9, wherein determining the configuration of the target data storage system is used for at least partially optimizing performance of the target data storage system.

17-24. (cancelled)